Instructions for Preparation of

CRAF AIRCRAFT BASIC DATA SHEET (AMC HQ Form 82)
and
CRAF AIRCRAFT PERFORMANCE FORM (AMC HQ Form 83)

1. Each of the above titled AMC HQ Forms must be prepared for each model and series aircraft committed to CRAF. For Convertible and Combi aircraft, data should be recorded for both passenger and cargo configurations on the same Form 82. A separate Form 83 should be prepared for each configuration.

a. Both forms must be typed or neatly printed (typed is preferred).

b. No substitute forms or overlays will be accepted.

c. Cargo aircraft data is computed using the 463L pallet (88" x 108" in size).

d. Passenger data is computed using 400 pounds per passenger and baggage.

e. See AMCR 55-8, chapter 2, sections E and F.

2. CRAF Aircraft Basic Data Sheet (AMC HQ Form 82).

a. Top of Form. Provide aircraft model and series, FAA registration number(s) (on the back of this form), total number of this type aircraft in your fleet and the number that are overwater capable. Indicate the type(s) of engines on each aircraft and the overwater navigation equipment currently installed, e.g., sextant, inertial navigation, dual Doppler.

b. Design and Operations Data. Base all data on current certified maximum takeoff gross weight and international standard atmosphere.

(1) Maximum Takeoff Gross Weight. The maximum weight authorized at takeoff brake release by applicable government regulations.

(2) Maximum Landing Gross Weight The maximum weight authorized at touchdown by applicable government regulations.

(3) Maximum Zero Fuel Weight. The maximum airplane weight above which any additional weight must be useable fuel and/or consumable propulsion agents.

(4) Operating Weight Empty. The weight of the aircraft in company operating configuration except for useable fuel, other propulsion agents, and payload. Use the average weight of all the type aircraft being reported. Include the weight of the aircraft structure, power plant, furnishings, systems, and other items of equipment that are considered an integral part of a particular aircraft configuration. Include standard items, crew, equipment, and supplies necessary for unrestricted CRAF operations.

(a) For cargo configuration: Include the loading system for military 463L pallets and lower lobe cargo containers for widebody aircraft. The weight of pallets and nets is not to be included.

(b) For passenger configuration: Use AMC contract configuration, including lower lobe baggage containers for widebody aircraft.

(5) Structural Weight Limit. The maximum design payload weight of passengers and passenger baggage, or cargo. Equal to Maximum Zero Fuel Weight minus Operating Weight Empty. Described as "Maximum Structural Payload" in some documents.

(6) Weight Limited Payload. Equal to the lessor of the Structural Weight Limit or the Maximum Landing Weight minus Operating Weight Empty and Reserve Fuel Weight.

(7) Number of 463L Pallets/Placement. The maximum number of military 463L pallets than can be loaded and locked on the main deck, and the placement of the pallets.

(8) Seats. **Company Standard:** The average number of revenue seats installed in the aircraft for regular civil passenger operations. **AMC Contract:** The number of revenue seats that would be installed in each aircraft for AMC operations in accordance with contract standards. If you do not have enough seats to meet AMC specification seating for all of this type passenger aircraft in your inventory, please indicate in the remarks section, the total number of seats available.

(9) Belly Bulk Area. The design useable belly bulk capacity. Do not include the lower lobe areas in widebody aircraft where containers or pallets can be utilized.

(10) Useable Fuel Capacity. The design useable fuel capacity in pounds. Use 6.7 pounds per gallon.

(11) Reserve Fuel. Use FAR 121, Domestic or International Requirements, as appropriate. Distance to alternate, 200 NM; distance to destination, Long-Range International aircraft, 3500 NM, and Short-Range International aircraft, 1500 NM. Do not use re clearance procedures.

(12) Cruise Speed. The optimum cruise speed at the range standard for the CRAF segment the aircraft is committed to. Record in True Airspeed (TAS) in Knots and Mach Number for jet aircraft. Record in TAS for turboprop aircraft.

(13) Initial Cruise Altitude. The initial cruise altitude for optimum flight operation.

(14) Widebody Aircraft Lower Lobe (Cargo and Passenger aircraft).

(a) Number of Containers/Type. The maximum number and type of baggage/cargo containers that can be carried in the lower lobe. Report the type most commonly used by your company.

(b) Tare Weight/Container. The average tare weight, in pounds, of the type container named above.

(c) Number of 463L Pallets. The maximum number of military 463L pallets that can be loaded and locked in the lower lobe. Identify the area in the lower lobe.

(15) Communications Equipment. The number of UHF/VHF/HF radios onboard the make and/or manfacturer.

3. CRAF Aircraft Performance Data (AMC HQ Form 83).

a. Top of form. Provide date prepared, type aircraft designation, aircraft configuration (passenger or cargo), operator - name of company, maximum takeoff weight, operating weight empty, cruise speed (True Airspeed in Knots and Mach Number. Use the optimum cruise speed at the range standard for the CRAF segment the aircraft is committed to), optimum cruise altitude(s), and reserve fuel used in graph computations.

b. Computations. Base computations on maximum takeoff gross weight and standard atmosphere.

(1) The range/payload graph should show the maximum payload at optimum altitude with reserve fuel unused.

c. Graph ordinates should be in accordance with the following.

(1) Payload Ordinates. Assign payload ordinate values in accordance with the following guidance, listed by type aircraft.

(a) B747s and MD-11s. The bottom line of the graph is 35,000 pounds and the top

line is 275,000 pounds. Each heavy line subdivision is 15,000 pounds and each light line subdivision 3,000 pounds. Label each 15,000 pound increment.

(b) DC10s and L1011s. The bottom line of the graph is 30,000 pounds and the top line is 190,000 pounds. Each heavy line subdivision is 10,000 pounds and each light line subdivision is 2,000 pounds. Label each 10,000 pound increment.

(c) B707s AND DC8s. The bottom line of the graph is zero and the top line is 120,000 pounds. Each heavy line subdivision is 7,500 pounds and each light line subdivision is 1,500 pounds. Label each 7,500 pound increment.

(d) B727s, B737s, DC9s, MD-80s, L100s, and other similar type aircraft. The bottom line of the graph is 15,000 pounds and the top line is 55,000 pounds. Each heavy line subdivision is 2,500 pounds and each light line subdivision is 500 pounds. Label each 2,500 pound increment.

(2) True Airspeed Ordinates. Assign true airspeed values, appropriate to the aircraft being reported. Light line subdivisions should not be assigned a value of more than 5 knots. Use smallest possible value. Average true airspeed graph computations should be made for each 500 NM stage length for aircraft in the Long-Range International segment and 250 NM for all other aircraft.

(3) Range (Stage Length) Ordinates. Assign range ordinate values in accordance with the following guidance. Label at the top and bottom of the form.

(a) Long-Range International Aircraft. The left vertical line of the graph is zero and the right vertical line is 7,000 nautical miles (NM). Each heavy line subdivision is 500 NM and each light line subdivision is 100 NM. Label each 1,000 NM increment.

(b) Domestic, Alaskan, and Short-Range International Aircraft. The left vertical line of the graph is zero and the right vertical line is 3,500 NM. Each heavy line subdivision is 250 NM and each light line subdivision is 50 nm. Label each 500 NM increment.

4. If you have questions concerning preparation of these forms, please write to us at HQ AMC/DOF, 402 Scott Drive Unit 3A1, Scott AFB IL 62225-5302, or contact us by phone at (618) 256-6751.